

**REMARKS**

Claims 1, 3-17 and 20-24 are pending in this application. By this Amendment, claims 1, 14, 17, 20 and 21 are amended. The amendments introduce no new matter. Claims 2, 18, 19, 25 and 26 are canceled without prejudice to, or disclaimer of, the subject matter recited in those claims. A Request for Continued Examination is attached. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

Claims 7 and 8 were previously withdrawn as drawn to a non-elected species. Applicants respectfully request rejoinder of claims 7 and 8 based on their direct and indirect dependence from claim 1 upon the finding of claim 1 allowable for the reasons discussed below. Claim 1 was previously indicated as being generic to all species.

The Office Action rejects claims 1, 3-6, 9-11, 13-16, 21-24 and 26 under 35 U.S.C. §102(b) over Takashi, in view of U.S. Patent Application Publication No. 2002/0057403 to Yasukawa, and further in view of U.S. Patent No. 5,978,056 to Shintani. Applicants interpret this rejection to be under 35 U.S.C. §103(a), as discussed below. Further, the Office Action rejects claims 12 and 17 under 35 U.S.C. §103(a) over Takashi in view of Yasukawa and Shintani varying in view of one of JP A 2002-244155 to Masao, or U.S. Patent No. 5,953,085 to Shimada.

Claim 1 recites, among other features, a storage capacitor electrically connected to the thin film transistor and the pixel electrode, the storage capacitor including a pixel-potential-side capacitor electrode and a fixed-potential-side capacitor electrode; a light-blocking shield layer disposed above the thin film transistor at a position between the data line and the pixel electrode, the light-blocking shield layer covering the data line, the light-blocking shield layer including a lower layer formed from aluminum and an upper layer formed from titanium nitride, the light-blocking shield layer having a fixed potential and being electrically

connected to the fixed-potential-side capacitor electrode of the capacitor, the light-blocking shield layer having two edges running substantially in parallel with each other, one edge including an indented portion that recedes inward from the rest of the one edge; a first relay layer formed in a same layer above the substrate as the light-blocking shield layer and electrically connected to the pixel electrode; an insulating interlayer disposed below the first relay layer; a second relay layer formed in a different layer above the substrate than the light-blocking shield layer and the first relay layer with the second relay layer disposed on one side of the insulating interlayer, and the light-blocking shield layer and the first relay layer disposed on the other side of the insulating interlayer, the second relay layer being electrically connected to the pixel-potential-side capacitor electrode of the capacitor; and a contact hole electrically connecting the first relay layer to the second relay layer through a portion of the insulating interlayer that corresponds to the indented portion of the light-blocking shield layer so that the pixel electrode is electrically connected to the pixel-potential-side capacitor electrode of the capacitor, wherein the second relay layer covers the indented portion of the light-blocking shield layer in plan view to provide a light shield at the indented portion.

The applied prior art references do not teach, nor can they reasonably be considered to have suggested, this combination of features. For example, the applied prior art references do not teach, or otherwise render obvious, a storage capacitor, light-blocking shield layer, first relay layer, or second relay layer with the positively recited features of claim 1.

Further, the Office Action acknowledges that Takashi fails to disclose the feature of a light-blocking shield layer disposed above the thin-film transistor at a position between the data line and the pixel electrode, as is also recited in claim 1. The Office Action asserts that Yasukawa teaches forming a light shield formed of the same material as the relay layer between the data line and the pixel electrode. In support of this, the Examiner references paragraphs [0065] and [0183] that describe element 71 of Yasukawa. However, these

paragraphs and element do not teach, nor can they reasonably be considered to have suggested, the relevant features. Specifically, these paragraphs and identified element do not teach, or otherwise render obvious, the light-blocking shield layer at a position between the data line and the pixel electrode. Rather, as described in paragraph [0183], the intermediary layer 71 of Yasukawa is disposed under the data line 6a. The pixel electrode 9a is disposed above the data line. Therefore, intermediary layer 71 is not disposed above the thin-film transistor at a position between the data line and the pixel electrode.

The Office Action also acknowledges that Takashi fails to teach the light-blocking shield layer including a lower layer formed from aluminum and an upper layer formed from titanium nitride. The Office Action asserts that Shintani teaches this feature. In support of this the Examiner cites col. 6, lines 38-47 of Shintani. The Office Action apparently considers Fig. 4 of Shintani disclosing a light shielding layer 51 made of aluminum covered with an anti-reflection film 52 made of titanium nitride.

The combination of the applied references with Takashi is unreasonable for at least the following reasons. The Office Action fails to identify specific objective evidence in the prior art that would have led one of ordinary skill in the art to combine the multiple references in the manner suggested. The Office Action asserts broadly that (1) it would have been obvious to apply a light shield of the same material as the relay layer between the data line and pixel electrode to increase TFT reliability, and (2) that it would have been obvious to apply a TiN and AL light shield to minimize reflection caused by the light shield. However, based on the different configurations of the devices disclosed in Yasukawa and Shintani, for example, the various locations and functions of their respective light-shield layers, it would not have been obvious to one of ordinary skill in the art to combine these multiple references with Takashi in the specific manner required to match the pending claims.

The conclusory statement of the Office Action is not enough to prove that there is a teaching, suggestion or motivation in the prior art to combine these references in the manner suggested by the Office Action. The Federal Circuit recently reaffirmed its prior holdings asserting that "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, Appeal No. 04-1616, March 22, 2006 (Fed. Cir.) (quoting *In re Lee*, 277 F.3d 1338, 1343-46 (Fed. Cir. 2002), and *In re Rouffet*, 149 F.3d 1350, 1355-59 (Fed. Cir. 1998)).

MPEP §2143.01 instructs that "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." MPEP §2143.01 further instructs that "[a]lthough a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.'" *See also In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Applicant respectfully submits that the rejection of at least independent claim 1 is improper in view of at least MPEP §2143.01 because the Office Action lacks the required specific evidence of a teaching, suggestion or motivation in the prior art for one of ordinary skill to combine the references in the manner suggested.

In other words, the Office Action fails to establish a *prima facie* case for why one of ordinary skill in the art, looking at Takashi, would reach out to either or both Yasukawa and Shintani for the specific features recited in claim 1. Rather, the Office Action appears to be applying impermissible hindsight reconstruction using Applicants' disclosure as a template to search for and find very specific features in different sources.

For at least the above reasons, the applied prior art references are not combinable in the manner suggested, and, even if they were, do not teach, nor can they reasonably be considered to have suggested, the combinations of features recited in independent claim 1.

Further, claims 3-17 and 20-24 are also neither taught, nor would they have been suggested, by the varying combinations of applied prior art references for at least the respective dependence of these claims directly and indirectly on independent claim 1, as well as for the separately patentable subject matter that each of these claims recite.

Accordingly, reconsideration and withdrawal of the rejections of claims 1, 3-17 and 20-24 as being anticipated by, or unpatentable over, the applied prior art references are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3-17 and 20-24 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:  
Request for Continued Examination

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